THIN SECTION LABEL ID: **400-U1606A-14R-1-W 21/25-TSB-TS#24**

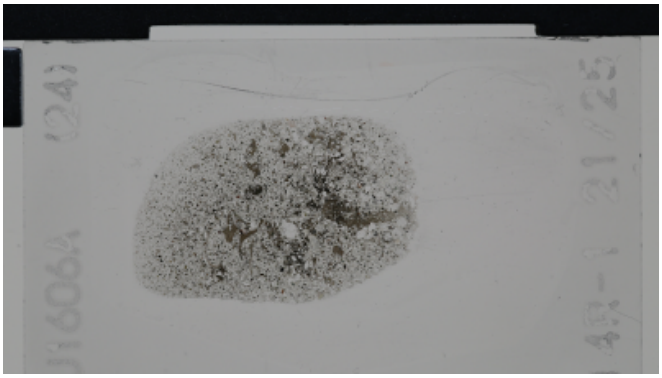
Thin section no.: **24**

Observer: Ives

Unit/subunit:

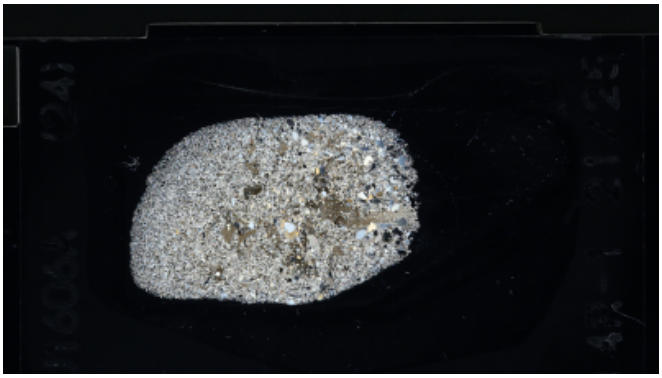
Thin section summary: Poorly sorted sandstone with shell fragments. Contains muddy ares. Mineralogy of sand grain is dominantly quartz, but is otherwise very diverse and includes igneous and metamorphic lithics, diverse feldspars, diverse pyroxenes, horneblende, opaque minerals, and metamorphic phylosillicates. Carbonate cemented.

Plane-polarized



73982471

Cross-polarized



73982491

Sediments & Sedimentary Rock

Lithology: sand

Lithic grains specifics:	igneous, metamorphic	**Lithic grains comments:**	Polycrystalline quartz with accessory minerals (felsic igneous), many bladed metamorphic (?) phylosillicates
Mineral grains:	quartz, feldspar, pyroxene, mica, other	**Mineral grain comments:**	Quartz dominant, plagioclase and potassium, pyroxene, horneblend, opaque minerals
Macrofossils:	other	**Comments on fossils:**	

Microfabric/ deformation:		**Textural maturity:**	Low	**Mineralogical maturity:**	Low

Grain-to-grain contacts:	floating, point	**Matrix comments:**	Clay
Cement mineralogy:	carbonate	**Cement mineralogy and type:**	Large, equant calcite grains

Porosity:	no porosity	**Porosity rank:**	1	**Porosity type:**	Primary

THIN SECTION LABEL ID: **400-U1606A-17R-4-W 37/41-TSB-TS#23**

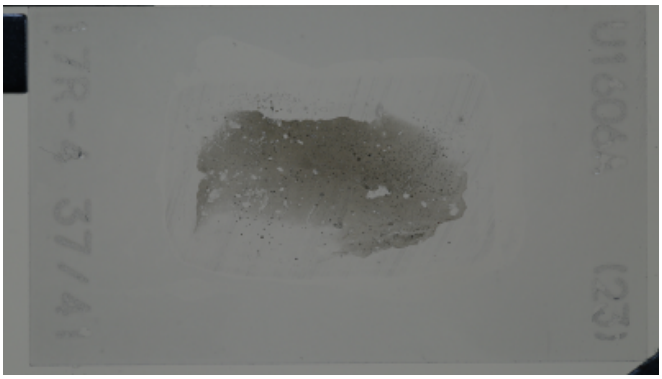
Thin section no.: **23**

Observer:

Unit/subunit:

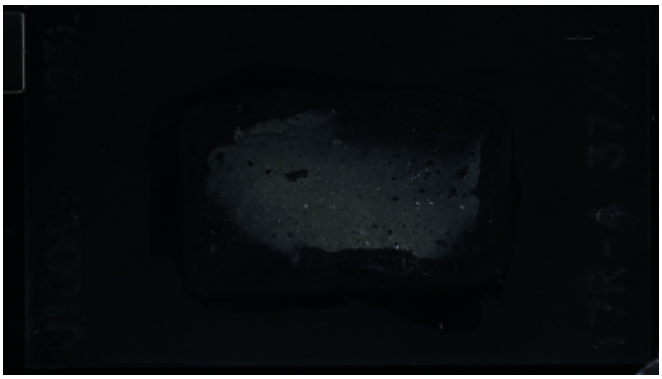
Thin section summary: Silty mud. Silt clasts are quartz, feldspar, and mica. Foraminifera, which look crystallized, occur. The matrix is clay.

Plane-polarized



74087661

Cross-polarized



74087731

Sediments & Sedimentary Rock

Lithology: silty mud

Mineral grains:	quartz, feldspar, mica, other	**Mineral grain comments:**	Common quartz, common feldspar, rare mica, and abundant clay
Macrofossils:	foraminifers	**Comments on fossils:**	Trace foraminifera

THIN SECTION LABEL ID: **400-U1606A-19R-1-W 74/78-TSB#24-TS#25**

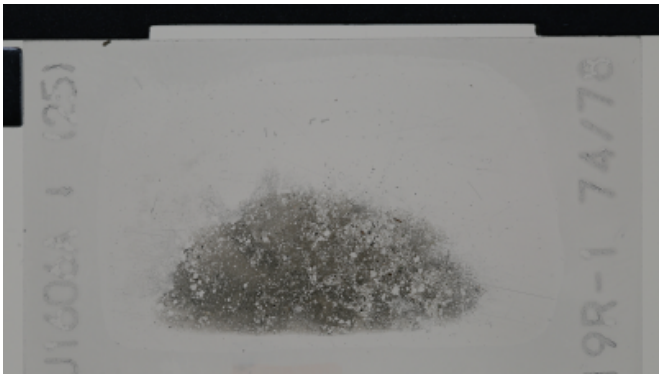
Thin section no.: **25**

Observer: Ives

Unit/subunit:

Thin section summary: Poorly sorted sandy mud. Sand grains are dominantly quartz with a wide variety of accessory lithics and minerals. Authigenic pyrite spherules and framboids common. Calcite cemented. Calcite replacing biogenic clasts. Two diatom types present.

Plane-polarized



73982641

Cross-polarized

73982661

Sediments & Sedimentary Rock

Lithology: sandy mud

Lithic grains specifics:	igneous, metamorphic	**Lithic grains comments:**	Polycrystalline quartz with accessory minerals (felsic igneous), many bladed metamorphic (?) phylosillicates
Mineral grains:	quartz, feldspar, glauconite, mica, other	**Mineral grain comments:**	Quartz dominant, feldspars common, pyroxene rare, mica rare, horneblende rare, glauconite trace, opaque minerals (mostly pyrite spheres) common
Macrofossils:		**Comments on fossils:**	2 different diatom types present, sometimes calcite replaced(?)

Microfabric/ deformation:		**Textural maturity:**	Low	**Mineralogical maturity:**	Medium

Grain-to-grain contacts:	floating, point	**Matrix comments:**	Clay, carbonate matrix
Cement mineralogy:	carbonate	**Cement mineralogy and type:**	Calcite common as equant grains. Difficult to tell in muddy portions if the calcite is primary or a cement. Large grains typically indicate areas of replacement or growth into biological spaces.

Porosity:	no porosity	**Porosity rank:**	1	**Porosity type:**	Primary

THIN SECTION LABEL ID: **400-U1606B-10R-1-W 0/6-TSB#48-TS#51**

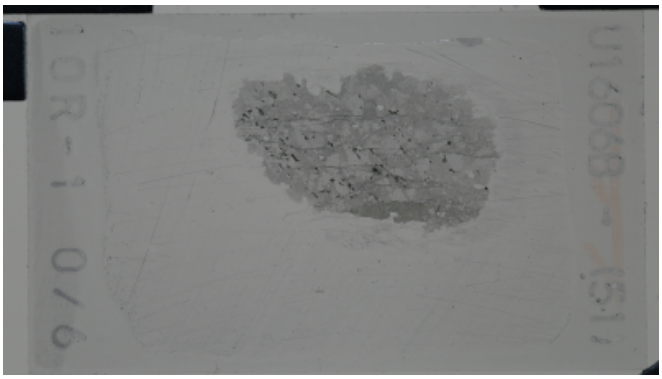
Thin section no.: **51**

Observer: Ives

Unit/subunit:

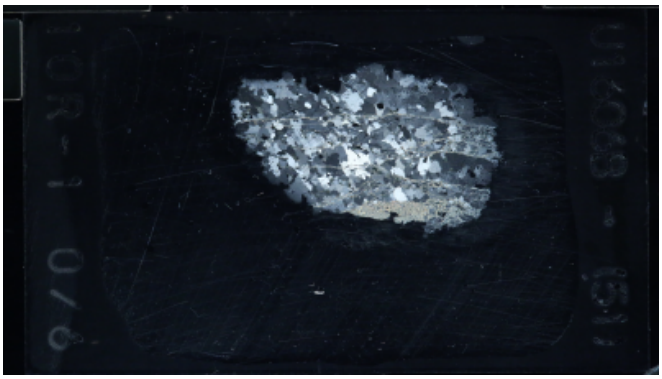
Thin section summary: Coarsely crystalline granitic rock with green veins. Quartz and feldspar most common constituents. Fractures are filled with a high birefringence mineral (pyroxene?).

Plane-polarized



74845941

Cross-polarized



74845961

Sediments & Sedimentary Rock

Lithology:

Lithic grains specifics:	igneous, metamorphic	**Lithic grains comments:**	
Mineral grains:	quartz, feldspar	**Mineral grain comments:**	Dominant quartz and dominant feldspar